DRAFT

Cumulative & Secondary Impacts: Strategy

STRATEGY #1: *Intergovernmental Decision-Making*

Summary

Coordinated decision-making between state and local officials during land use planning and permitting processes can improve policies aimed at protecting coastal resources. This strategy aims to identify and minimize coastal resource use conflicts by securing intergovernmental agreements to use the capabilities of Coastal GEMS, a tool-based Web resource, to view and analyze the state of Virginia's coastal resources in the face of increasing coastal development. The most important aspect of this strategy is to secure agreements with federal, state and local agencies/governments to consult this web-based resource during their land use planning and permitting processes to promote coordinated decision-making. Additionally, by providing the most up-to-date data to all stakeholders in the coastal zone, all individuals could help identify the additional information (i.e. gaps) needed to better manage our coastal resources which could lead to modifications of the current regulatory structure.

The Coastal Geospatial and Educational Mapping System (Coastal GEMS), in which the VA CZM Program has invested considerable funding to date, is designed to promote coordination between state and local governments in making informed land use decisions which might have impacts to valuable aquatic resources. Through this system, one will find data and maps of the best remaining blue and green infrastructure in Virginia's coastal zone, as well as information on the value and current management of those resources. Coastal GEMS pools together the best available and most recently produced geospatial data from across all Virginia state agencies and organizations, providing users with a one-stop shop for coastal resource information and planning tools. Access to Coastal GEMS will occur via the VA CZM website through an interface that is navigable and understandable to users of all skill levels (agency professionals and the general public) throughout the Commonwealth. Additionally, various training workshops will be conducted throughout the Coastal Zone to ensure that all those with an interest in Virginia's coastal resources will understand how to use Coastal GEMS as well as provide a mechanism for feedback to improve future versions.

There are many potential uses for Coastal GEMS. Local planners can create their own overlays of land use and sensitive coastal resources and define areas for "appropriate development" when updating comprehensive plans. Localities could analyze the impact of different policy scenarios in their area, allowing them to develop the best actionable policies to prevent or reduce cumulative and secondary impacts. Data layers displayed in Coastal GEMS could also be combined to produce a composite data layer or analytical model/tool for better coastal management decisions. As an example, information on land use, water quality, bottom type, and shellfish condemnation zones can be combined to address aquaculture siting issues on the Eastern Shore. Although many data layers have already been digitized or created, continued development of data layers and new analytical tools is crucial to fostering stronger linkages between state water use policy and local land use policy. Agreements from all agencies to continually provide the VA CZM Program with their best available data is also essential in ensuring informed decisions are made with regard to sensitive coastal resources.

In order to make Coastal GEMS as useful as possible, an advisory group of data producers and users will be formed to guide future development of this tool. Contractual services will be obtained to help staff the advisory group and to hold training and outreach

sessions on Coastal GEMS targeted at the various anticipated end users. During this process, memoranda of agreement will be negotiated with the various users as to how the use of Coastal GEMS will be incorporated into their coastal resource management efforts. Coastal GEMS will also be enhanced during next five years with additional data layers, tools and features. Initially, data on coastal embayment flushing characteristics will be developed, along with other data layers that have already been prioritized. After receiving input from the advisory group, additional data layers and analytical tools will be developed to further enhance the usefulness of Coastal GEMS for more informed coastal resource management decisions.

In addition to the enhancements to Coastal GEMS, this strategy includes a pilot project with the Middle Peninsula Planning District Commission (MPPDC) for applying GEMS as a tool to manage use conflicts. As the Middle Peninsula continues to evolve from less rural to more suburban, conflicts between landside and waterside uses have increased significantly. As a component of this strategy, the MPPDC will initiate a pilot public policy project to gain understanding of what the land and water assets are for an identified study reach and seek a mediated policy dialog related to use conflict. A Waterfront Use Conflict Roundtable will be assembled to gain a better understanding of how nearshore areas are being used now and what constraints exist for existing and new uses, and determine the issues and conflicts that are affecting local governments' ability to make the most of their waterfront. This Roundtable, composed of local elected officials, government administrators, local planners, waterfront property owners and commercial fishing interests, will support coordination between jurisdictions, outreach and training, and transferability to additional impacted localities. The Roundtable will use Coastal GEMS and additional geospatial data as an issue investigation and decision-making tool for local planning and development of policy recommendations concerning addressing waterfront use conflicts.

Enforceable Policies/Outcomes

- Memoranda of Agreement between VA CZM and willing coastal planning district commissions, cities, towns and counties to incorporate Coastal GEMS information into planning and permitting procedures.
- Memoranda of Agreement between VA CZM and willing state and federal agencies to incorporate Coastal GEMS information into planning and permitting procedures, and provide recently updated GIS data to VA CZM for incorporation into Coastal GEMS.
- Updating of Coastal GEMS Web site to show where MOAs are in place. A coastal zone-wide map would show localities where agreements are signed.
- New data, including tidal embayment flushing rates, for improved coastal resource management decision making.
- Anticipated inclusion of Coastal GEMS information in local plans and ordinances.
- The initiation of policy dialog during the Middle Peninsula Waterfront Use Conflict Roundtable is expected to lead to policy recommendations for additional study regarding the formation of Waterfront Improvement Districts, additional management/enforcement options, and other policies to address use conflict concerns yet to be identified for the identified study area. The Roundtable policy recommendations will be used as a model to advance similar waterfront use conflict policy discussions in adjacent coastal counties.

Tasks	Time	Budget
Task 1: Establish a Waterfront Use Conflict Roundtable in Middle Peninsula to identify waterside-landside issues and use conflicts along target reach, analyze geospatial data of conflicts, and develop policy recommendations to address local waterfront use conflicts ($10K in Year 1, $30K in Year 2)	Years 1-2	$40,000
Task 2: Develop and conduct training workshops on the use of Coastal GEMS for coastal cities, counties, PDCs, state and federal agencies, non-profit environmental groups, housing developers, energy developers, etc. Hold 3 open house workshops in Northern Virginia, Richmond, and the Tidewater Region, and 8 PDC workshops for local government officials. Produce promotional materials to encourage use of Coastal GEMS.	Year 1	$20,000
Task 3: Contract with the Institute for Environmental Negotiations (IEN-UVA) to draft model MOAs between VA CZM and both state agencies and local governments to use Coastal GEMS information in land use planning and permitting processes. IEN will convene an advisory group of Coastal GEMS data producers and users to help guide development of Coastal GEMS. MOA language will also define a process for regularly updating and submitting geospatial data to VA CZM for use in Coastal GEMS.	Year 1	$10,000
Task 4: Contract with VIMS to develop data on embayment flushing rates for tidal areas of Virginia's coastal zone. Data will initially be used for aquaculture management and improved local land use planning.	Year 1	$60,000
Task 5: Additional data layer development. VA CZM and coastal partners will determine the most important blue/green infrastructure data needs, analytic tools, or composite data layers to be produced. Data needs currently identified include bathymetry, riparian buffer areas, floodplains, invasive species, forest resource assessments, population growth trends, use conflict areas, migratory songbird stopover habitat, essential fish habitat, bottom type, sediment type, and many more yet to be determined. ($15k in Year 1, $60k in Year 2, $50k is Year 3, $85k in Year 4, $83k in Year 5) – one to two data layers or tools developed per year.	Years 1-5	$293,000
Task 6: Continue to advise and work with state agencies and localities to sign MOAs (produced in Task 3). Provide assistance for updates and maintenance to the Coastal GEMS web application.	Year 2	$10,000
Total		$433,000

Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total Request**
Was $130k $115,000	Was $70k $100,000	$50,000	$85,000	$83,000	$433,000

Task 2: EIN could facilitate through the CPT. Develop an MOA b/w state agency and one with local governments. Could the grant be the process of developing an MOA even if one isn't reached? GEMS should be used for site review and rezoning purposes. Marcia said there needs to be an incentive for local govs such as reduced time to get permit from state agencies. But since info is constantly updated wouldn't want to link to permitting. Lewie suggested at the workshops ask local govs if the tool was useful and if they would be interested in signing an MOU to use GEMS. Year 1 MOA with state agencies and Year 2 MOA with local govs. MOUs

to update data provided to CZM as well. Login user restricted access to sensitive data if under the MOU.

Data layers: bottom type (condition), bottom sediment type, sand mining data, riparian buffer areas (RRBC and DOF doing this around the Rappahannock), bathymetry, navigational chart, brownfields suitable for development, economic development selection tool, underground fuel storage tanks, flow corrected upland stream model for southeast. Forest resource assessment, forest cover, forest loss, wildland urban interface, migratory stopover habitat, economic valuation data, floodplain mapping, invasive species mapping, population growth trends, soils, underwater historic and cultural data model, ground/surface water supply, water quality standards